Amarra

User Manual

Version 2.4

Amarra Table Of Contents

About This Manual. 3
1. 0.0 Thank you! 4
2.0.0 Amarra Minimum System Requirements: 4
3.0.0 Installing Amarra Software: 4
3.1 Uninstalling Amarra Software 7
4.0.0 Evaluating and Activating Amarra: 7
4.0.1 Evaluating Amarra: 9
4.0.2 Activating Amarra: 9
5.0.0 Launching and Using Amarra : 11
5.1.0 Amarra Application Menus : 12
5.1.1 The Amarra Menu:
5.1.2 The File Menu: 12
5.1.3 The Playlist Menu: 14
5.1.4 The Desk Menu: 14
5.1.5 The Windows Menu: 15
5.1.6 The Help Menu: 15
6. 0.0 Using Amarra 16
6.1.0 Using Amarra and iTunes 17
6.2.0 Amarra EQ 18
6.3.0 Amarra Preferences 21
6.4.0 Using Amarra with Remote Control 23
6.4.1 Using Apple Remote and your iPhone / iPad 23
6.4.2 Using Amarra with Infrared Remote Control 23
6.4.3 Using your Airport Express 23
6.5.0 Amarra and FLAC 24
6.6.0 Amarra Background Manager: 25
6.7.0 Amarra Playlist Mode 27
6.9.0 Audio Device Preferences 29
7.0.0 Registering Your Amarra Software 34
8. 0.0 Troubleshooting Guide 35
Basic Macintosh Setup Tips 35
Issue: Amarra Authorization Answers. 36
Issue: How to set up a remote volume 36
Issue: Audio Clicking or Ticking Sound. 37
Issue: Songs do not change or sound correctly. 37
Issue: Amarra does not play audio. 38
Issue: Amarra does not play audio. 39
Issue: Sample Rate Does Not Change With Soundfile. 40
9.0.0 Amarra (Version 2.3 and earlier) 41
10.0.0 Support 43

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1.0.0 Thank you!

Thank you for purchasing the Amarra Computer Music Player. You are about to enjoy the Ultrafidelity sound of Amarra. Designed to work with your Apple™ MacIntosh Computer and with iTunes, Amarra provides a seamless integration for high resolution music playback.

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This document details the installation and operation of Amarra.

The Amarra 2.4 installer will install the following items on to your Macintosh Computer:

- Amarra 2.4 Computer Music Player
- Amarra Documentation
- FLAC Component

2.0.0 Amarra Minimum System Requirements:

Amarra requires the following:

Computer:

- Any Intel–based Mac - PPC / G5 is not supported.
- RAM: 4 GB minimum, 4 or more preferred
  Amarra will work with less RAM but may experience dropouts with high-resolution music
- I/O: Core Audio Interface (Built-in, Optical, USB, and FireWire)

Supported Audio Hardware Interfaces:

- Most USB and FireWire interfaces work well and are recommended for best performance.

The built-in Macintosh Audio (analog/optical/digital) will work with Amarra, but has limited sample rate support. Please visit the Supported Hardware section of www.sonicstudio.com for more information.

Software:

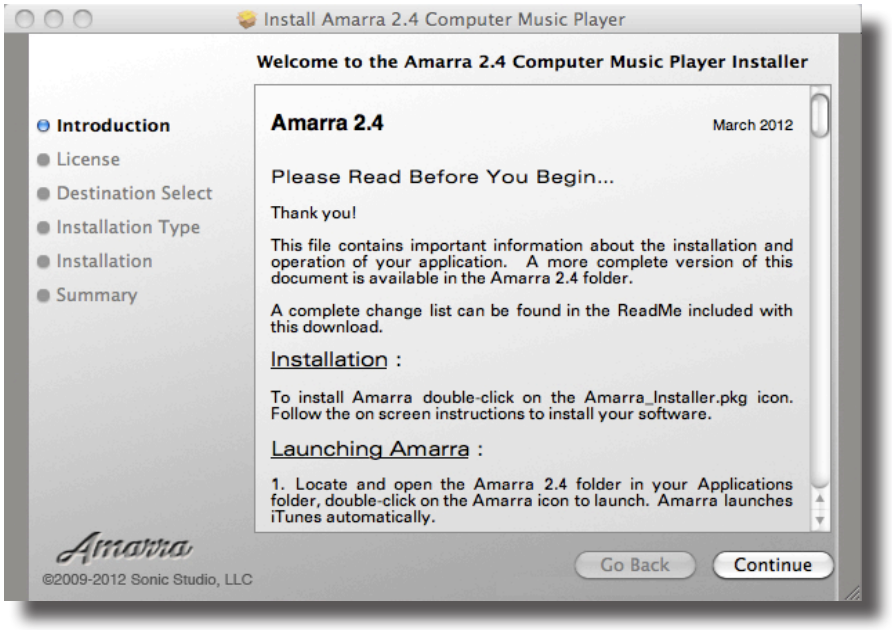
- Mac OS X 10.5 and above
- Amarra
- iTunes

NOTE: A network connection is required to authorize your software.

3.0.0 Installing Amarra Software:

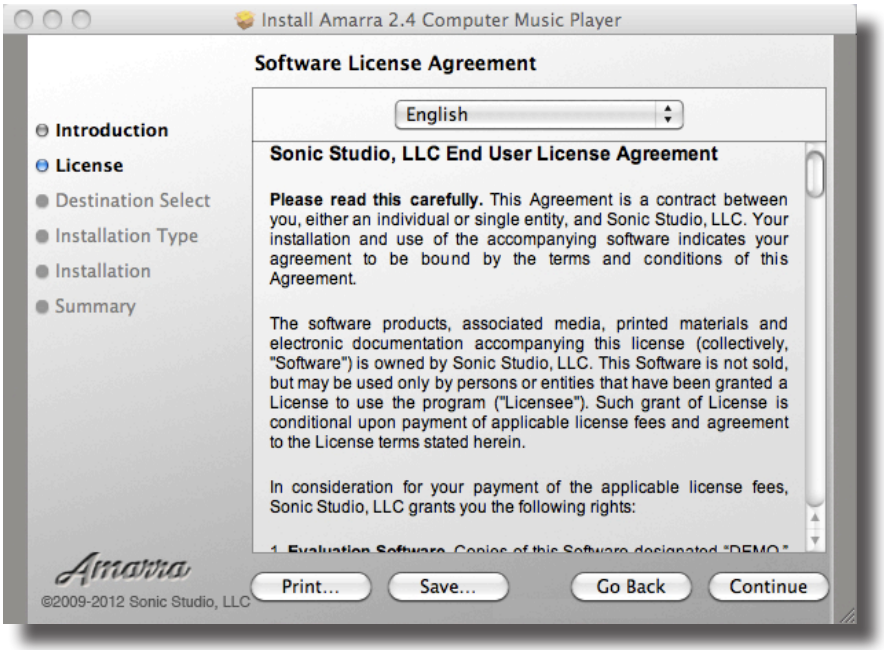
To install Amarra, download the software using the URL sent in your email or from www.sonicstudio.com. Locate the download of Amarra, first unzip if needed and then double-click on the Amarra_Installer icon. Follow the on screen instructions to install your software.

Welcome screen for Amarra Installer:


Install Amarra 2.4 Computer Music Player
Welcome to the Amarra 2.4 Computer Music Player Installer
Introduction
License
Destination Select
Installation Type
Installation
Summary
Amarra 2.4
March 2012
Please Read Before You Begin...
Thank you!
This file contains important information about the installation and operation of your application. A more complete version of this document is available in the Amarra 2.4 folder.
A complete change list can be found in the ReadMe included with this download.
Installation :
To install Amarra double-click on the Amarra_Installer.pkg icon. Follow the on screen instructions to install your software.
Launching Amarra :
1. Locate and open the Amarra 2.4 folder in your Applications folder, double-click on the Amarra icon to launch. Amarra launches iTunes automatically.
Amarra
©2009-2012 Sonic Studio, LLC
Go Back
Continue

Select Continue.

Software License Agreement:


Install Amarra 2.4 Computer Music Player
Software License Agreement
Introduction
License
Destination Select
Installation Type
Installation
Summary
English
Sonic Studio, LLC End User License Agreement
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Amarra
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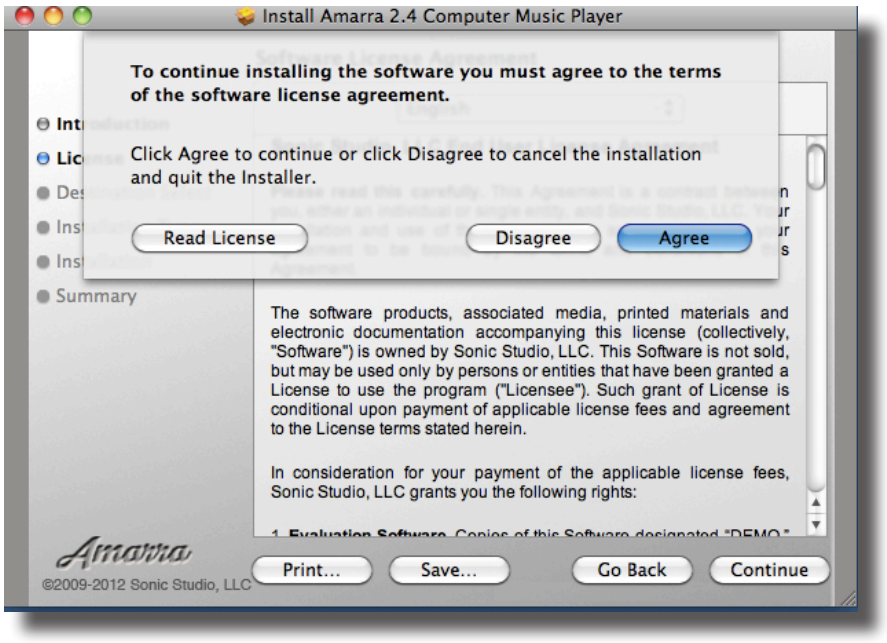
Save...
Go Back
Continue

Select Continue.

Agree to the Software License Agreement

Please Read Carefully. Select Continue.


Install Amarra 2.4 Computer Music Player
To continue installing the software you must agree to the terms of the software license agreement.
Click Agree to continue or click Disagree to cancel the installation and quit the Installer.
Read License
Disagree
Agree
Summary
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Amarra
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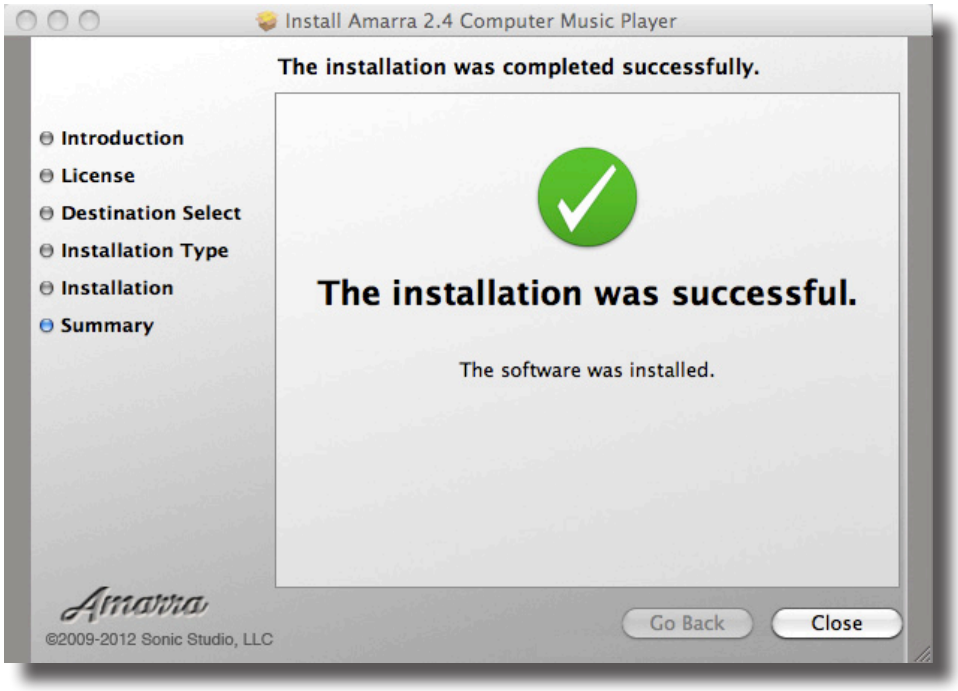
Print...
Save...
Go Back
Continue

Select Agree to agree to the End-User Software License Agreement

Install Amarra :

Click Install.
(You will be prompted for your Mac password and the software will be installed.)



Success!
Select the Close button to quit the Amarra installer.

• Amarra Computer Music Player is installed into the Applications folder.
It is installed here: ~/Applications/Amarra 2.4

• Amarra installs FLAC QuickTime components used for native FLAC playback.
They are installed here: ~/Library/Components/

3.1 Uninstalling Amarra Software

To remove Amarra and uninstall the software please run the "uninstall_amarra.command"in the Extras Folder. This script may prompt you for your password and will remove Amarra and all installed components.

3.2 Easy Setup Script

As part of the installation process, you will be presented with the Easy Setup window. Choose Easy Setup to have Amarra install, provide an icon on your dock and clear your Amarra preferences. You will also be asked if you'd like to launch Amarra once setup is complete.

4.0.0 Evaluating and Activating Amarra :

Amarra is licensed for use via a simple Internet Authorization process.

NOTE: An Internet Connection is required to Activate Amarra.

4.0.1 Evaluating Amarra :

Amarra offers a FREE 15-day, full featured trial of Amarra. When you launch Amarra you will be presented with the following dialog :

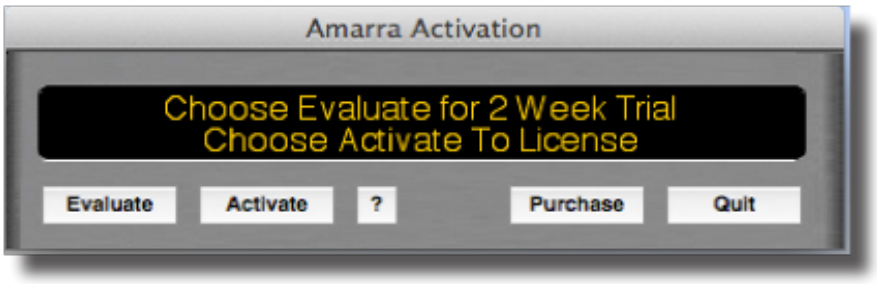


Figure 1: Evaluation dialog box.

Evaluate button:	Evaluate Amarra for 15 days. No Email address or any information is required.
Activate button:	Brings up the Activation Dialog (see below).
Purchase button:	Takes you to the online store to purchase Amarra and Amarra Hifi.
Quit button:	Closes the Activation window and exits the application.
? button:	Brings up the Amarra Activation Guide.

Simply click on the 'Evaluate' button to begin your 15-day trial, it's that simple! If you've already had a trial of Amarra in the past, you will receive the following message.

> You can only have One evaluation.
> Please write support@sonicstudio.com for a second evaluation.

4.0.2 Activating Amarra :

To Activate Amarra you will need the following:

- Your Amarra Activation Code which was sent to you when you purchased your software.
  i.e AMARJ8T6SXP48AD3ZQZT is an example code for Amarra
- **Or**, Your MINI Activation Code which was sent to you when you purchased your software.
  i.e MINIAET3SLP48EB3Z4OT is an example code for MINI
- NOTE: Current Users please use your serial number to activate your copy of Amarra
- A working Internet Connection

To Activate your software, first choose the Activate button in the Evaluation Dialog. You will then presented with the Amarra Activation window shown below :

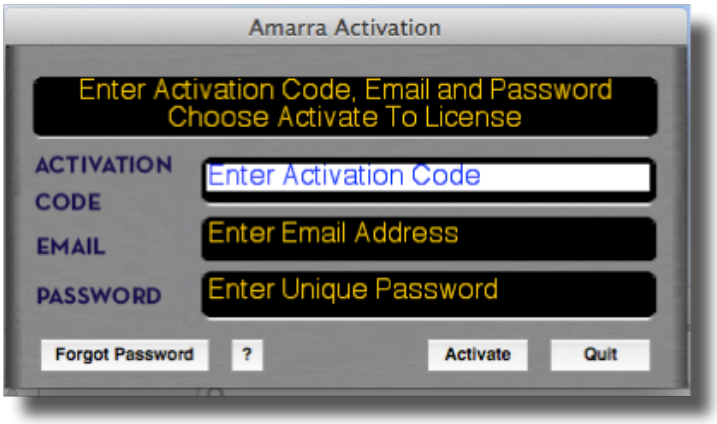


Figure 3: Authorization dialog box.

Forgot Password Button:	Sends your password to the email used when activated
Activate Button:	Sends your Code, email address and password to activate Amarra
Quit button:	Cancels and closes the Activation window
? button:	Brings up the Amarra Activation Guide

NOTE:
Avoid Lockouts - Have your Activation code and password available.
Your password will be sent to you registered email account.

If you do not recall your password be sure to use the "Forgot Password" Button.
Your password will be sent to your registered email account.

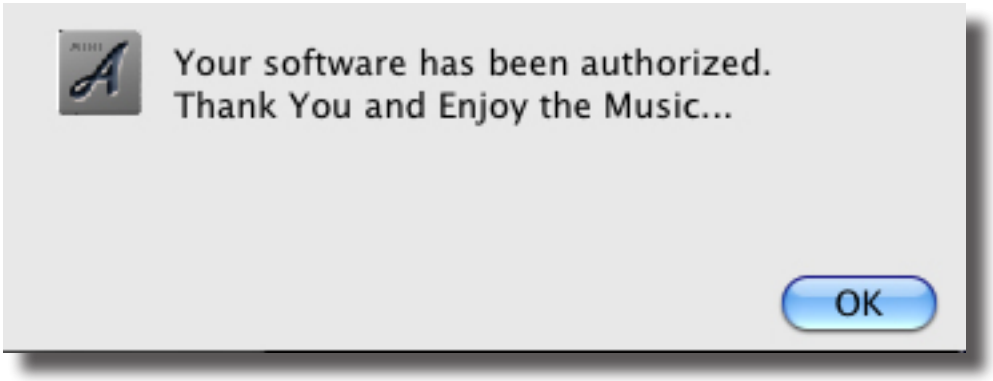
If you do not recall your Activation Code, write us at support@sonicstudio.com and remember to include your registered email address.

You can also check your License Control Panel for your Activation Code Please read section on License Control Panel in Amarra Activation Guide for information.

Enter information into the provided fields

A) Copy and Paste your Activation code into the Activation Code area.
B) Add your email address and create your own unique password in the appropriate fields.
Note: Your password should be something simple such as Amarra01.
C) Click on the Activate button to activate your Amarra product.

IMPORTANT NOTE:
Your Activation Code is delivered to you via email.
If you purchased before April 15, 2011, use your product Serial Number as your Activation Code.



Success! Your Amarra Software has been authorized.

NOTE: Amarra 2.4 uses a licensing mechanism that will attempt to automatically update your license to version 2.4. If you are presented with an activation window, enter your current Activation Code, Email and Password in the spaces provided and click 'Activate'. You will be asked for a new password. Enter a new, unused password up to 16 characters in length and click 'OK'.

NOTE: To prevent Lockout use the "Forgot Password" button to have your password sent to you.

WARNING : After 3 attemptls with an incorrect password a lockout will occur.
Write to support@sonicstudio.com if you have a lock out and support will clear it.
Include your activation code.

Enter a new password to reactivate your copy of Amarra.

Authorizing Amarra After Evaluation Period Expires :

After the Evaluation period has expired, it's easy to receive an Activation Code that enables you to continue to enjoy the ultrafidelity sound of Amarra. Simply select the **Purchase** button and you will be directed to an online store to purchase Amarra.
Your Activation Code will be sent to you via email. Once you receive your Activation Code, follow the steps outlined above to authorize your copy of Amarra.

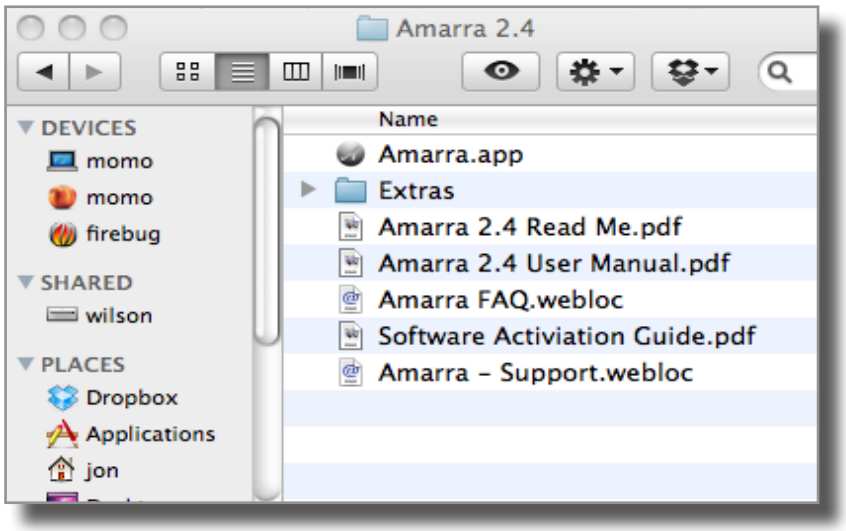
License Control Panel

The SoftWorkz License Control Panel allows you to manage your license and password. We strongly encourage users to create an LCP account. Please read the Amarra Activation Guide for more informa-

5.0.0 Launching and Using Amarra

Open the Applications folder on your Mac, locate the Amarra 2.4 folder.
This folder contains the Amarra application as well as documentation and an Extras folder.

Click on the arrow to the left to open the folder:



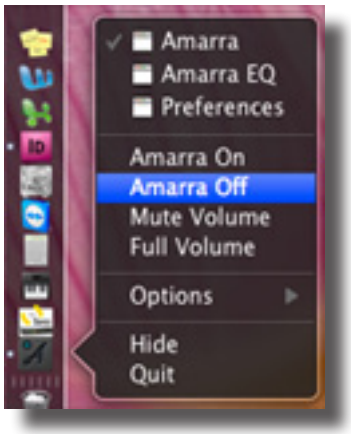
Amarra folder and the Amarra application.

NOTE: Launch Amarra first, not iTunes. Double clicking on the Amarra icon launches Amarra and iTunes.

HINT: If not on your Dock, Drag and drop the Amarra application icon to your dock for easy launch. You can also use the "Add_Amarra_To_Dock" command.

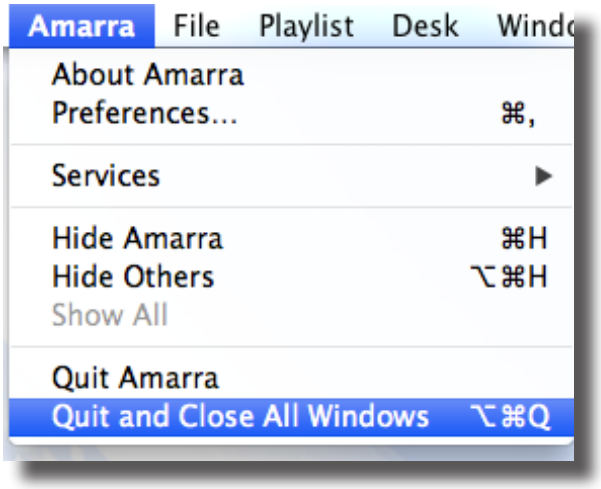
Amarra and the Finder Dock

Using the Control Key to access the Contextual Menu allows control of different commands in Amarra. For more information about the Dock, see the Help menu of your Mac.



5.1.0 Amarra Application Menus :

5.1.1 The Amarra Menu:



About Amarra: Opens the modal About window.
This is useful for verifying the version number of Amarra that you are running.
Click anywhere in the window to close it.

Preferences: Opens the Preference window for Amarra.
See Section 6 for more information.

Services: This menu proves access to any Services that are available to Amarra.

Hide Amarra: Hides all Amarra windows.
To reveal the windows, click on the Dock icon.
Or, tap the ,+tab key to cycle through running applications to select Amarra.

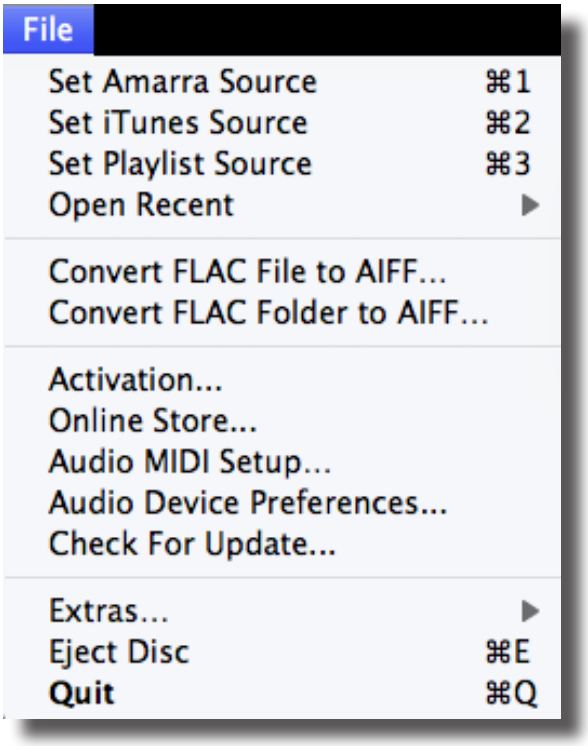
Hide Others:
Hides all windows other than Amarra.

Show All: Reveals all windows.

Quit Amarra: Quits Amarra.

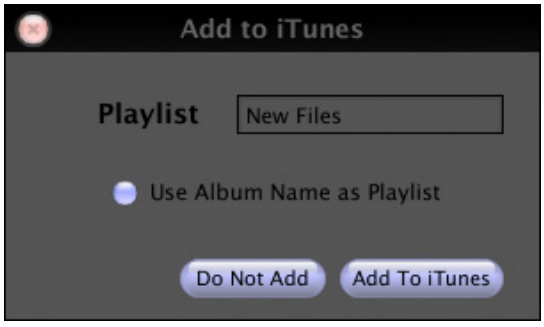
Quit and Close All Windows: Quits Amarra.

5.1.2 The File Menu:



Set Amarra As Source [cmd+1]: : Sets Amarra as the source for playback.
Set iTunes As Source: [cmd+2]: Sets iTunes as the source for playback.
Toggling between ,Cmd-1 and ,Cmd-2 is a good way to compare Amarra and iTunes.
Set Playlist Source: [cmd+3]: Sets Amarra's Playlist as the source for playback.

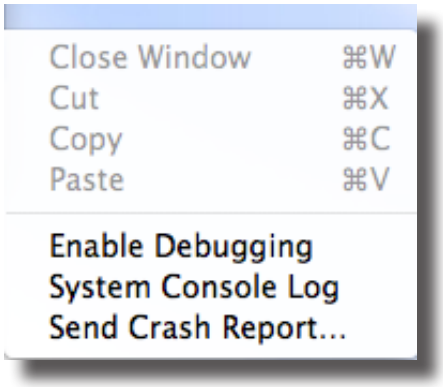
Convert FLAC File to AIFF... :
Navigate to FLAC files and convert them to AIFF format.
The shift and ,(command) keys allow you to select more than one file.
Convert FLAC Folder to AIFF... :
Navigate to a folder containing FLAC files and convert the folder's contents to AIFF.
Specify the source folder and a destination folder for the AIFF files.
You can also add the files to iTunes and create a playlist as shown below.



See Section 6 for more information on FLAC support.

Activation... : Opens the Amarra Activation window. See section 4 for more information.
Panner: Opens the Panner window for Amarra.
Audio MIDI Setup : Opens the Audio MIDI Setup window. This is useful for configuring your DAC.
Audio Device Preferences: Opens the Audio Device Preferences for managing your DAC.
Preferences: Opens the Preference window for Amarra. See Section 6 for more information.
Eject Disc [cmd+E]: Ejects the CD from tray.

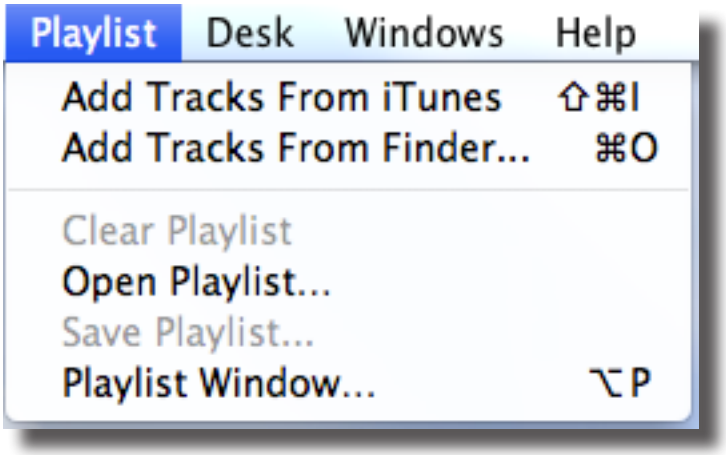
Extras: Under File Menu



Cut: Cuts the currently selected string or item to the Clipboard.
Copy: Copies the currently selected string or item to the Clipboard.
Paste: Pastes the currently selected string or item from the Clipboard.
Enable Debugging: Allows Amarra to log detailed information on its operation to the Console Log. Use the Console Application to view this log (in Utilites Folder).
Send Crash Report: Should an application crash occur, sends information to Sonic Studio. Do Not Send Crash Logs to Apple.

NOTE: Switch between Cmd+1 and Cmd+2 to compare sound between Amarra and iTunes.

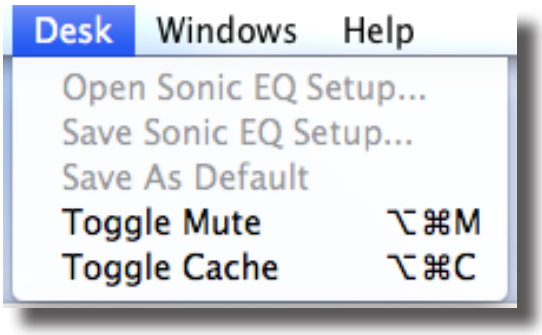
5.1.3 The Playlist Menu:



Add Tracks From iTunes: [sft+cmd+i] : Adds tracks selected in iTunes into an Amarra Playlist.
Add Tracks From Finder... [cmd+o] : Select and add audio tracks from the Mac Finder.
Clear Playlist: Clears the content of an Amarra Playlist.

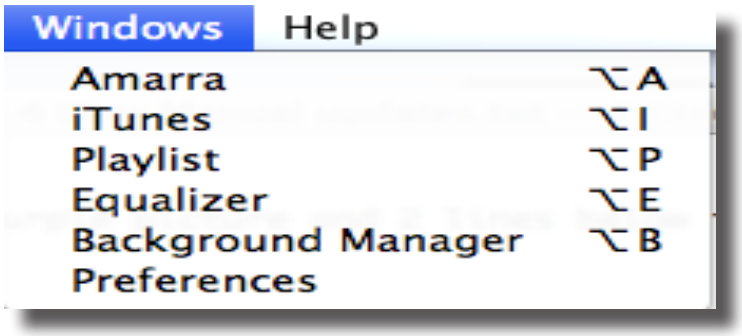
Open Playlist: Opens a saved Playlist.
Save Playlist: Saves open playlist for later recall.
Playlist Window [opt+P]: Shows the Playlist Window.

5.1.4 The Desk Menu:



Open Sonic EQ Setup...: Allows you to navigate and open a previously-saved Sonic EQ Setup.
Save Sonic EQ Setup: Allows you to save and name the current (open) Sonic EQ Setup for future recall.
Save As Default: Save the current (open) Sonic EQ Setup as the Default EQ.
Each time you launch, this Sonic EQ Setup will be recalled and enabled.
Mute [opt+cmd+M] : Turns Mute on and off.
Cache [opt+cmd+M] : Turns CACHE Mode on and off.
Cache mode uses RAM for playback for increased fidelity.

5.1.5 The Windows Menu:



Amarra [opt+a]: Opens the main Amarra window.
iTunes [opt+i]: Opens the main iTunes window.
Playlist: [opt+p]: Opens the Amarra Playlist window. Enables Playlist mode.
Equalizer [opt+E] : Opens the Sonic EQ window. Does not turn in on or off.
Background Manager [opt+B]: Opens the Background Manager window.
Preferences: Opens the Amarra Preferences windo

5.1.6 The Help Menu:

Amarra Help: Opens the Amarra Help document.
You can find Links to the Sonic Studio Website for Support, Downloads, and the latest information.

6. 0.0 Using Amarra and iTunes

Amarra runs alongside Apple's iTunes program. This allows you to manage and access all your music through the main iTunes Music Library or through custom iTunes Playlists.

Amarra allows you to choose either a Vertical Window or Horizontal Window and occupies a space above (or below,) or to the side of the Main iTunes Window. Horizontal Window is the default.

Amarra (Vertical / Horizontal) and iTunes.

You can use iTunes like you always have, select the songs / Playlists and play. Amarra will automatically playback any track it can and seamlessly switches to iTunes for playing back of protected files or other files that Amarra may not be able to play back in your current configuration.

Amarra plays most compressed files including FLAC, MP3, AAC, and Apple Lossless (ALAC).

NOTE: Amarra does not play some variable bit rate or low bite rate MP3 files.

Using the Playlist button Amarra allows you to load the selected tracks from iTunes into Amarra as a Playlist. With the Playlist loaded iTunes is Not Used and is now stopped. This is indicated by the Playlist button turning Yellow and now showing the Tracks that are loaded as a menu.

See Section 6.6 for more information on using the Playlist.

NOTE: This feature will play the loaded tracks without any gaps.

NOTE: Amarra will load tracks and disable iTunes so the tracks can then be played in Amarra. This can provide optimal sound reproduction.

6.1.0 Using Amarra:

1. TRANSPORT

The Previous Track, Play/Pause, and Next Track buttons. are located here.

2. Amarra VOLUME

This slider controls the output volume.
The buttons are hot spots for 0, and -144 dB.
The Up and Down Arrow keys on your keyboard can be used to control the volume.

NOTE: iTunes and Amarra Volume are kept in sync.

NOTE:
You may notice a small delay or echo while the iTunes Volume is being moved.

3. CACHE PLAYBACK

CACHE Loading for playback.

Pre-load songs into RAM to minimize disc access. This can be used in Amarra or Playlist Modes.

4. TRACK INFORMATION

The upper display shows name and artist for the track.

Gain is displayed in Red if not 0 along with the dither status.

At the bottom the memory being used for CACHE playback. Sample Rate, current time, and EQ Settings are displayed.

5. Source

AMARRA / iTunes

This indicates Amarra's playback status:
Blue = Amarra is playing
Orange = iTunes is playing

PLAYLIST

This button sets the Playlist as the source.

6. TRACKS

This displays the list of tracks loaded in the current Playlist.

7. AMARRA EQ

This opens (or closes) the Amarra EQ window. Option click to enable/disable EQ. The presets are shown

8. CONTROLS

Playlist Commands
- Add Tracks from iTunes
- Add Tracks from Finder
- Clear Playlist
- Open Playlist
- Save Playlist

Playback Options
- Stop at end
- Repeat Playlist

Link Windows:
- keeps iTunes and Amarra window in synchronization

9. ARTWORK

Displays artwork for Track.
Double-click to bring up artwork Window.

To show/hide artwork.

10. METERS / INFO

Use the "I" for Device Information.

TIP: KEYBOARD SHORTCUTS - Use the following key commands in place of menu commands.
1, 2, 3 - Change source to Amarra / iTunes / Playlist.
5,6 - Previous Track / Next Track
8,9 - Down / Up Volume
a, c, l, m - Add From iTunes / Clear Playlist / Load Tracks, Mute
e - Show EQ Window

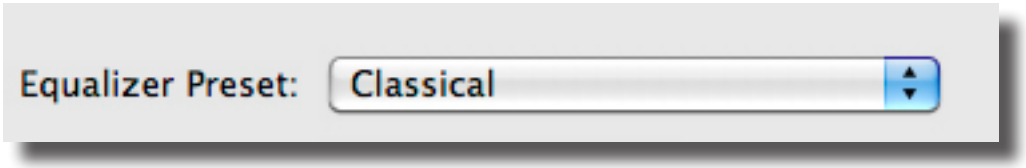
TIP: Holding the Mouse over any button will display a Help Tip displaying what the button does.

6.2.0 Amarra EQ

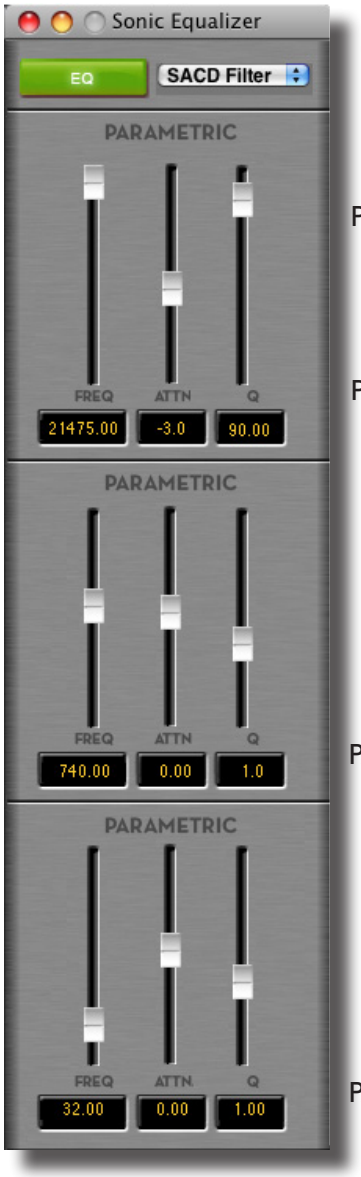
This section presents an overview of the Amarra EQ. Use this to alter the sonic characteristics of the sound. Amarra EQ employs a minimal phase topology and double precision operations to ensure inaudible results while preserving the fidelity of the most delicate acoustic performances.

The EQ window is opened by clicking on the EQ button at the top of the Amarra window.
Use Option-Click on the EQ button to mute the EQ.

The EQ can also be set using the EQ presets as set in the Track Information from iTunes.
Select a Track in iTunes and using "Get Info" select the "Options" Tab and set the EQ Preset.



EQ (On/Off)
This turns on Amarra EQ, or when unlit indicates the EQ is not being used.



PRESETS

PARAMETRIC 1

PARAMETRIC 2

PARAMETRIC 3

Amarra comes with a set of EQ settings that are modelled on the iTunes presets. In addition there are 3 Room Node settings for common bass adjustment processing.

NOTE: The Desk menu items allows you to save and recall your EQ settings.
Set up an EQ, go to the Desk menu and select Save Sonic EQ Set Up.

NOTE: If the "Link iTunes EQ" preferences is checked then Amarra will use the EQ Preset defined in iTunes to set the EQ for a Track.

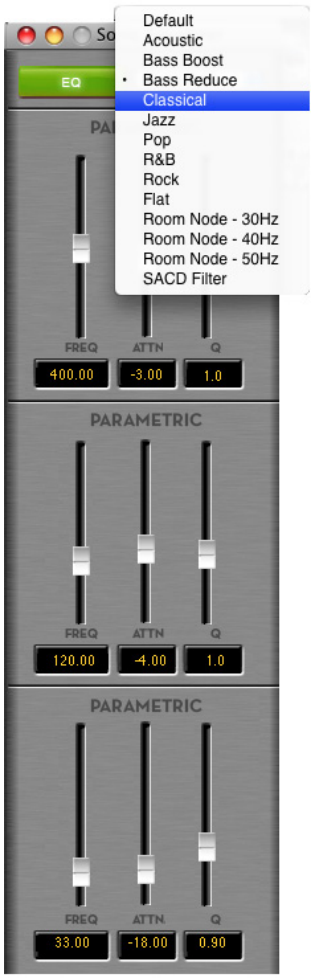
Parametric EQ :

The parametric filter has parameters for Resonant Frequency, Gain and Quality Factor. The Quality Factor, or Q, is defined as the resonant frequency, or center frequency in the case of a symmetrical filter, divided by the bandwidth. The filter is a 1st Order filter.

Amarra provides three parametric filters to tailor your sound. All processing is done using 64bit floating point arithmetic. The parametric filters are classic, three parameter versions, with Resonant Frequency, gain, and Q. Q or Quality Factor is defined as the resonant frequency, or center frequency in the case of a symmetrical filter, divided by the bandwidth. The bandwidth is, in turn, defined as the one or two frequencies at which the filter response is 3 dB up or down from unity gain.

The Amarra EQ Window also has a set of presets based on common Room Nodes for correcting simple room acoustics. Additional presets are based on an analysis of iTunes EQ Presets. Amarra uses the Sonic EQ to process the audio and provide the selected effect.. The following presets are provided:

Default User Setting
Acoustic
Bass Booster
Bass Reducer
Classical
Jazz
Pop
R & B
Rock
Flat
Room Node = 30 Hz
Room Node = 40 Hz
Room Node = 50 Hz
SACD Filter



Expressing the width of a filter as a Quality Factor, rather than bandwidth, provides a more intuitive sense of the filter's subjective "sound," since the same value of Q will produce different bandwidths at different frequencies. The higher the frequency, the wider the bandwidth will be for a given Q value, which roughly corresponds to our auditory mechanism's ability to perceive a filter's action.

As an example, a parametric filter with a Q of 1 has a bandwidth of 100 Hz when its center frequency is set to 100 Hz but, it has a bandwidth of 1000 Hz when the center frequency is set to 1000 Hz.

Curves for Parametric EQ :
The family of curves shown below include a wide Q of 0.5, a medium Q of 2.0 and a narrow Q of 10. The order or slope of this filter is 6 dB per octave.

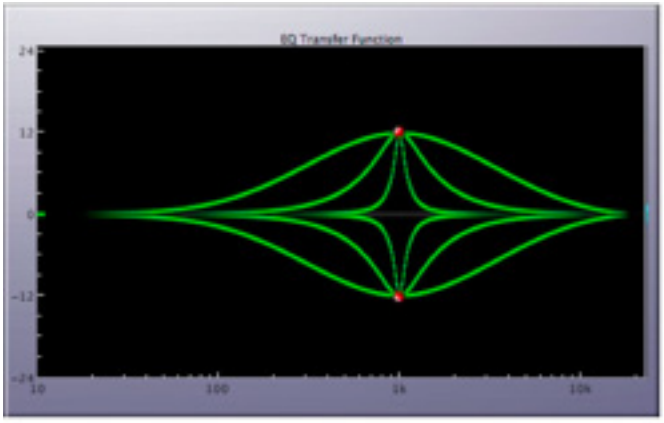
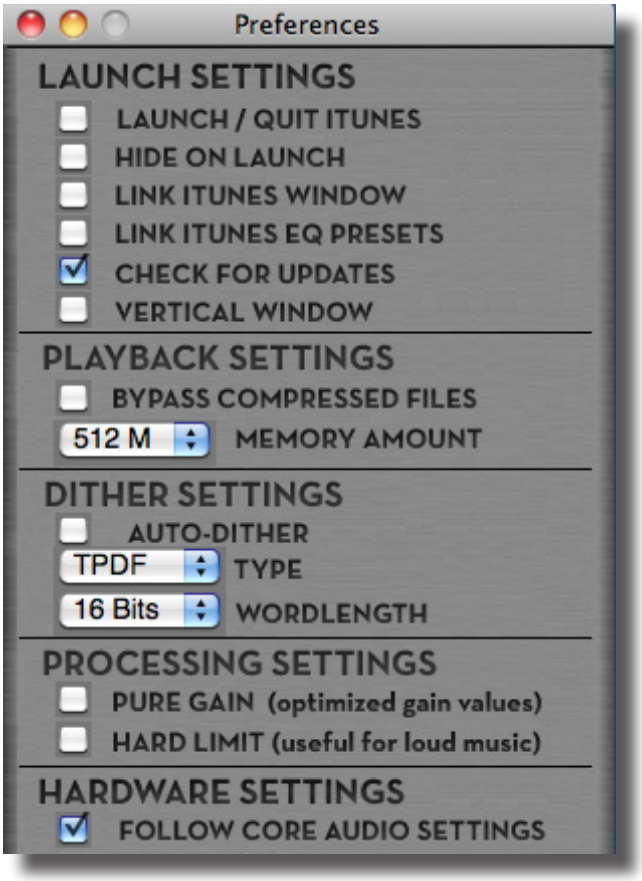


Figure 10.2: 1st order parametric with f_c of 1000 Hz

6.3.0 Amarra Preferences

This section presents an overview of the Amarra Preferences.



LAUNCH SETTINGS
LAUNCH / QUIT ITUNES:
Forces iTunes to launch or quit with Amarra.

HIDE ON LAUNCH : Amarra will hide on launch.
LINK ITUNES WINDOW :
Forces iTunes to remain 'attached' to Amarra's main window (Not used for Vertical Window).

LINK ITUNES EQ PRESETS :
Forces Amarra to follow the EQ settings in iTunes.

CHECK FOR UPDATES
Amarra will check for updates on launch.

VERTICAL WINDOW
Vertical window. (restart required)

PLAYBACK SETTINGS:

BYPASS COMPRESSED FILES :
Forces Amarra to skip over lossy encoded music files like MP3 and AAC.

MEMORY AMOUNT :
Maximum amount of Random Access to use to store audio in Cache Mode. A setting of 1 GB is good for loading One full CD.

DITHER SETTINGS
AUTO-DITHER :
Automatically enables redithering when Amarra's Volume is not a full volume (0.0 dB).
TYPE :
TPDF:
Enables Sonic Studio's Shaped TPDF Dither.
Shaped: Disabled
Sonic Noise Shaped Dither (not supported)
Wordlength:
Sets number of bits for output. This setting should match your DAC's word length. For best quality enable Auto-dither if less than 24 bits.

Using dither can bring a better sound when gain or EQ is being used. When dither is enabled the output of Amarra will be dithered to the setting of the Output Wordlength specified. This can be useful for providing a better sound when Gain is used or if your DAC only supports a limited word length (16 or 20 bits).

NOTE: When the Output Wordlength is set to 24 bits the dither will be "disabled" if the Gain has not been modified (at full volume). Once the Gain is adjusted then dither is re-enabled.

Amarra provides two dither options:

Sonic TPDF and Sonic's advanced psychoacoustic noise shapped dither.

Your personal perference may decide which one you prefer.

PROCESSING SETTINGS

Pure Gain :

Forces Amarra to change gain in 1 bit steps for less gain interpolation and higher quality.

Hard Limit :

Changes the way Amarra reproduces consecutive over samples. Recommended for music with limited dynamic range.

HARDWARE SETTINGS

FOLLOW CORE AUDIO SETTINGS :

Automatically follow Core Audio Settings when changed. Use Audio Device Preferences to set your Output Audio Device to a different Audio Device.

6.3.2 Additional Sonic Hardware Preference Settings

Amarra provides additional preferences when used with a Sonic Audio Interface. These controls allow integration of Analog Gain Control and more.

SONIC HARDWARE SETTINGS :

Requires Sonic Studio Hardware and the Amarra Console Software. Please visit our website or contact support@sonicstudio.com for information on Sonic Audio Hardware.

Launch/Quit Console:

Forces Sonic Console to launch or quit in sync with Amarra.

Dim Front Panel:

Dims the front panel display.

Control Volume:

Interlocks Amarra's gain control with the hardware gain control so either can be used.

Gain Adjustment:

Set the system gain to match professional (0 dB) or consumer electronic (-10 or -14 dB) standard levels.

6.4.0 Using Amarra with Remote Control

6.4.1 Using Apple Remote and your iPhone / iPad

You can use the Free Apple Remote application for your iPhone / iPad to control Amarra. Please visit the AppStore and download this useful application.

When in Amarra / iTunes mode Amarra will follow iTunes and work with the Apple Remote. You can change the Volume and select tracks and Amarra will follow iTunes.

NOTE: When in Playlist Mode only the volume can be controlled using the Apple Remote Application.

NOTE: You may notice a small doubling of sound while using the remote volume control. This will stop once you stop moving the volume (iTunes will mute).

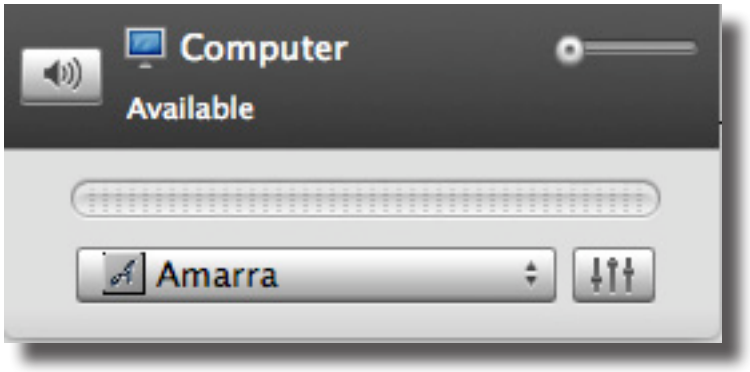
6.4.2 Using Amarra with Infrared Remote Control

The Amarra Remote Application is used to support the Apple Infrared Remote. The Amarra Remote Application can be found in your Extras Folder and is only required for the infrared.

We can also recommend the "rowmote" iPhone/iTouch Application available via the iApp Store.
For more information please visit http://www.rowmote.com/Rowmote/Rowmote.html

6.4.3 Using your Airport Express

Using the "Airfoil" application from Roque Amoeba allows you to route the output of Amarra to an Airport Express. For more information visit http://www.rogueamoeba.com/airfoil/mac/.



6.5.0 Amarra and FLAC

Amarra supports the FLAC audio file format for playing back your music. In addition, Amarra has built-in FLAC to AIFF file conversion to allow easy integration with your iTunes Library.

Why convert FLAC to AIFF?

- Easy integration with iTunes
- Integration with iTunes Metadata
- Integration with Apple Remote
- Simplified ease of us (convert and forget)
- Less overhead on system resources.

6.5.1 Converting FLAC to AIFF

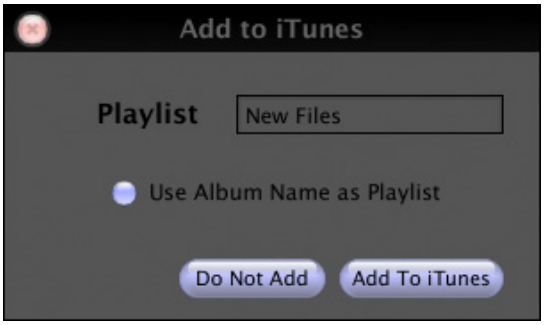
Under the FILE Menu there are two commands. You can convert a FLAC File to AIFF or convert an entire Folder of Music For Example, an album from a high resolution download music site.

Convert FLAC File to AIFF... :.

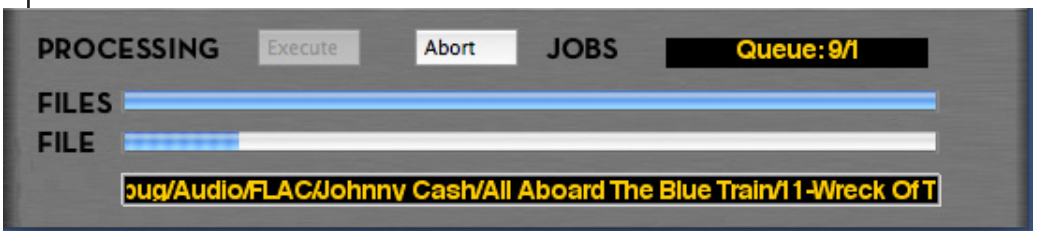
Navigate to FLAC files and convert them to AIFF format.
The shift and command keys allow you to select more than one file.

Convert FLAC Folder to AIFF... :

Navigate to and select the source folder containing FLAC files.
Specify the destination folder for the AIFF files.
You can create a Temporary Folder for this.
You can also add the files to iTunes and create a playlist using the dialog below.
This will copy (and organize if your iTunes Preferences are set) with your iTunes library.



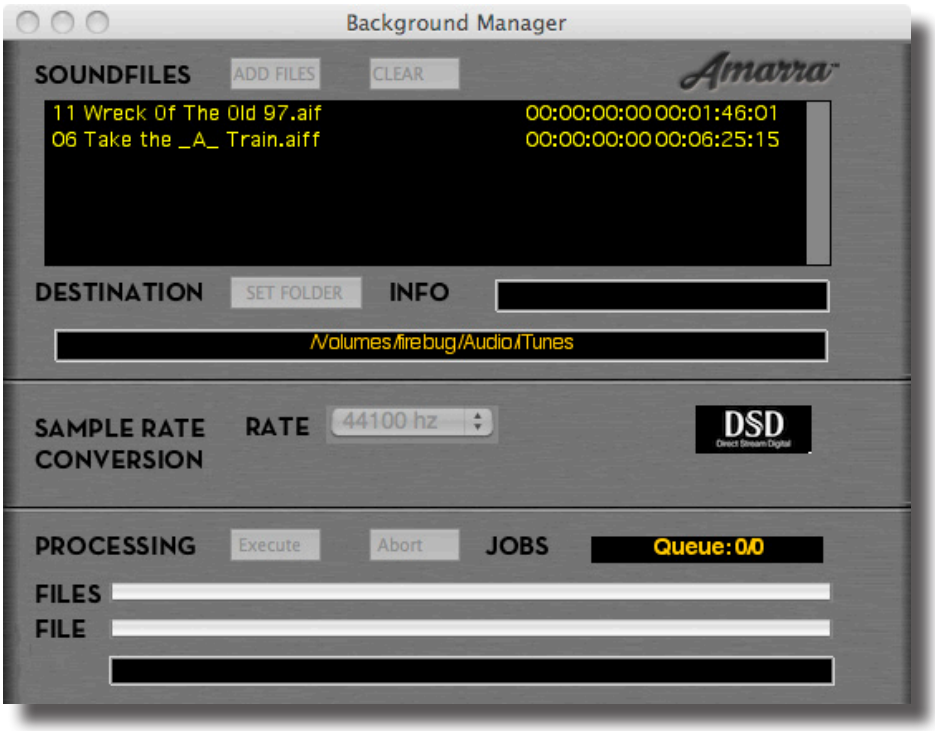
NOTE: The FLAC to AIFF operation is done in the Background. To look at the progress of the conversion use the Background Manager window. The FLAC to AIFF conversion progress will be displayed in the bottom of the window (see section 6.6.6 below).



6.6.0 Amarra Background Manager

Amarra is equipped with the Background Manager whose function is to process sample rate conversion as a background process. The Background Manage window largely consists of 2 areas, the "Soundfiles" area and the "Processes" area, topped by the Target Folder field.

To open the Background Manger, select the Windows > Background Manager command.



The Background Manager window.

The Background Manager utility allows:

1) The drag and drop of audio files into the Soundfiles section.

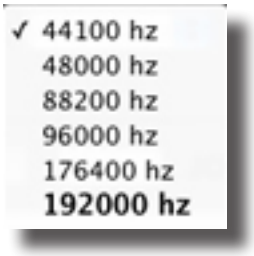
When a sound file is selected in the list, the black status bar below the list displays the sample rate, word length and number of channels of the selected file. Multiple sound files can be added to the list by repeating this action.

To remove sound files from the list, click to select the list entry and delete it by hitting the backspace or delete key. To clear the list of all sound files, click the Clear All button to the right of the Soundfiles list.

2) The definition of a target folder for the processed file.

In the Target Folder field, the target folder for newly created sound files is specified. To select a target folder, click on the Set Folder button. A standard Mac OS browser opens, allowing you to navigate, create and/or choose the desired destination folder. Option–clicking on the Choose button forces Amarra to use the input file's folder also as the target folder.considered a sample rate conversion. If, however, the target sample rate does not match the clock rate of the playback system, then the process is considered a varispeed. In either case, the actual processed data in the file is identical, only the sample rate flag is different. SRC preserves pitch and duration, while varispeed produces modified pitch and duration from the original.

The Target Sample Rate menu includes the following choices:



3) The definition of a target sample rate.

The Sample Rate Conversion background process has many choices of target sample rate. As with any SRC process, if the target sample rate matches the clock rate of the playback system, then the process is considered a sample rate conversion. If, however, the target sample rate does not match the clock rate of the playback system, then the process is considered a varispeed. In either case, the actual processed data in the file is identical, only the sample rate flag is different. SRC preserves pitch and duration, while varispeed produces modified pitch and duration from the original.

4) A Queue section to monitor the processes progress.

Processes can be deleted from the processes list by clicking on the process and then hitting the backspace or delete key. To clear all processes from the Processes list, click the "Clear All" button to the right of the Processes list.

Once all necessary processes have been selected and placed in the right processing order, they can be automatically performed upon the selected sound files by clicking the "Execute" button. The sound files and the processes to be applied upon them are then "queued" and processing commences. To indicate this action, the "Queue" indicator to the right of the Execute button shows the number of sound files and processes queued.

Once the processes are being executed, all sound files and processes remain in their respective lists.

To abort the current process, click the Abort button and the current process will be aborted, initiating the next process in the Queue.

6.6.1 DSD Conversion

Amarra supports the conversion of DSDIFF Files to AIFF. This includes most DSD files with the ".dsd" and ".dff" extension. Other files with .DSF files and some .DFF formats are under development.

6.7.0 Amarra Playlist Mode

Amarra provides its own Playlist window that can be used to control playback of soundfiles instead of iTunes When Tracks are loaded into a playlist there are accessible from the "Tracks" Popup in the main Amarra Window and in the separate Playlist window. When the "Playlist" button is selected then the Playlist Window may also be visble .

Playlist Tracks In Amarra WIndow

The playlist is also used for playback of gapless material (reads the iTunes Gapless tag). Tracks can be loaded via a Selection From iTunes (from the Library, from an iTunes Playlist or from a CD) or using the Finder. You can also Drag and Drop files from the finder or from iTunes itself onto Amarra to add them.

You can drag tracks to re-order and delete tracks by using the Delete Key.

Amarra Playlist

Reordering Tracks in Playlist :

You can rerder the tracks in a Playlist by dragging the track to its new location.

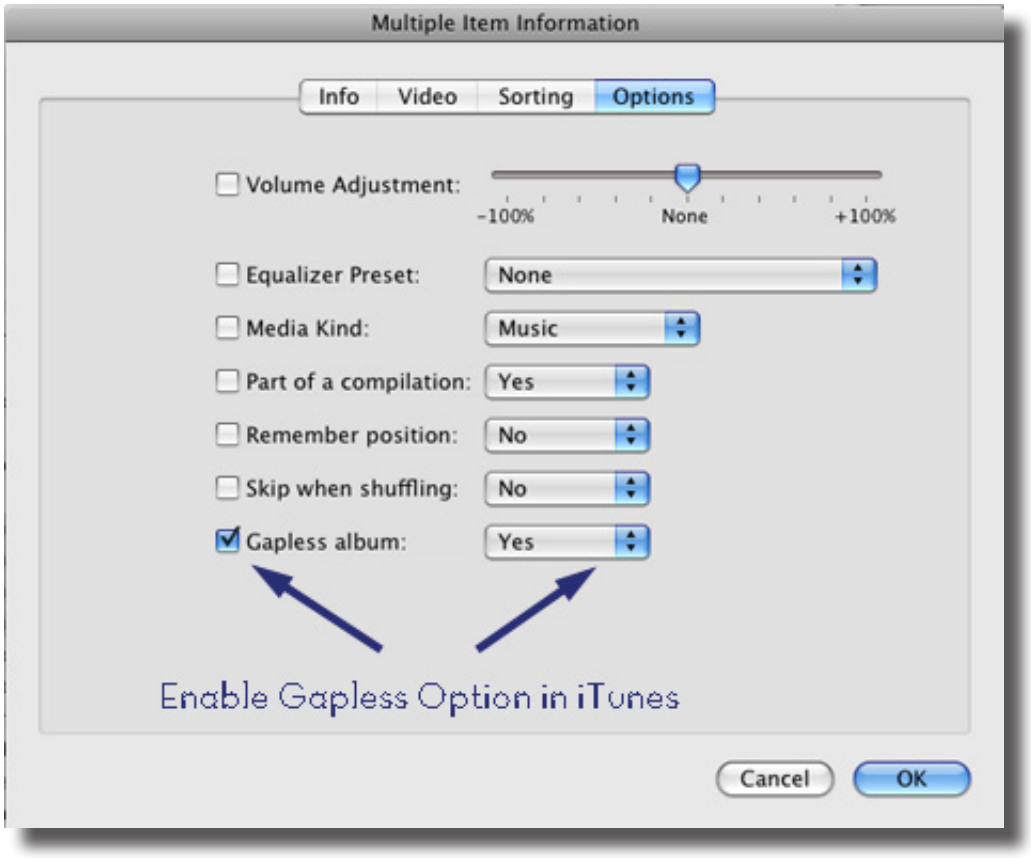
Playlist Navigation :

Left Arrow = skip to next track and play it

Right Arrow = skip to previous track and play it

Down or Up Arrow = move to another track without stopping playback of current track. Hitting the Return key or spacebar 2 times stops the current track's playback and starts playback of the newly selected song.

NOTE: Use Playlist mode for playback of gapless recordings. Make sure the Gapless option is enabled for each song of a gapless recording. You can also open a set of tracks using the Finder with no gaps by holding down the Option Key when you confirm the set of files in the Open File Dialog.



iTunes song Get Info dialog box, Options tab.

LINK BUTTON

- This button will link the Playlist window to the Amarra Window.

PLAYBACK OPTIONS

Using the Playback Options button on the Amarra window you can choose to stop the playlist, repeat or load the next set of consecutive tracks in to the Playlist.

- Do Not Repeat Playlist and stop at end.

- Repeat Playlist from top.

ADD ITUNES / ADD FINDER

Files can be added from iTunes or from the Finder using these commands. The Add Finder command will prompt you to selected files to add. You can select multiple files and folders.

USING APPLE REMOTE VOLUME

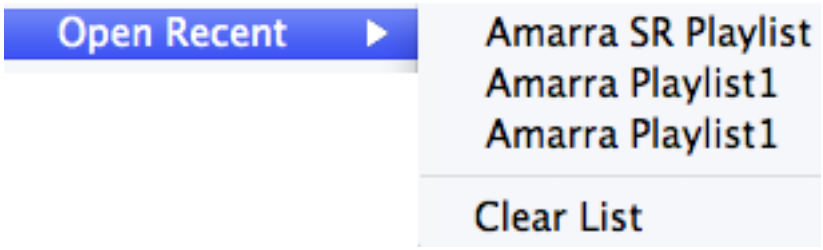
You can use your remote to control the Volume using your Apple Remote or Rowmote Application.

DRAGGING FILES AND FOLDERS

Files can be added from iTunes or from the Finder by dragging the Files or Folders from the Finder to the Playlist Window. You can also drag Tracks from iTunes.

NOTE: Inserting a CD into your Mac's drive can yield stunning results when played back through a Playlist. Select the CD in the left margin of iTunes, then press the ADD ITUNES button in Amarra.

NOTE: Recent Playlist are stored in the "Open Recent Menu"



6.9.0 Audio Device Preferences

By default, Amarra uses current Core Audio settings for the Audio interface currently configured as in Audio MIDI Setup. You can override this by disabling the "Use Default Code Audio" setting as well as in the Preferences Window. You can then configure for playback any valid output by means of the File > Audio Devices Preferences window.

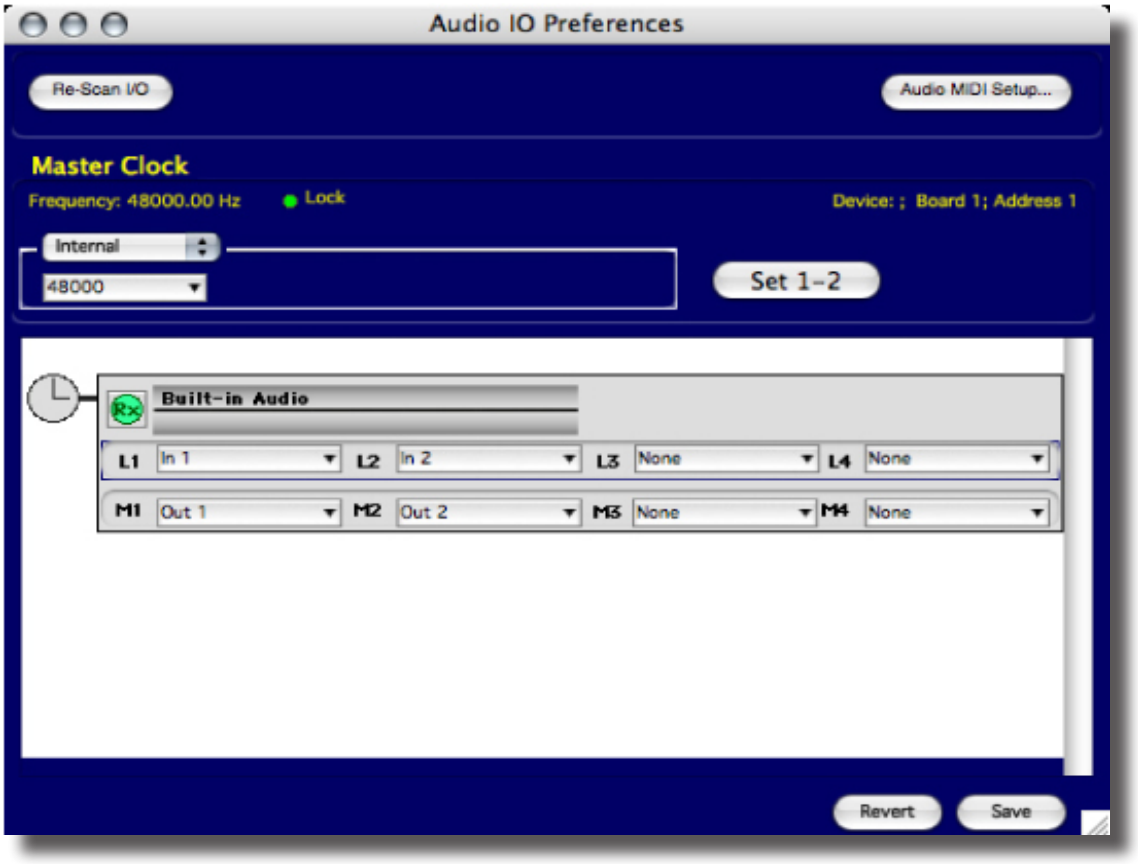


Figure 5.1: The Audio I/O Preferences window

Figure 5.1a: The Audio I/O Preferences window with Sonic Studio Series 300 hardware attached.

The bottom half of this window shows the currently active audio interface as selected in Audio MIDI Setup.

You may need to add aggregate device when the device does not have input and output.

In the area of the audio interface icon, the line inputs L1 to Ln are shown, together with a drop down menu selector. When one of the line input selectors are clicked, a list of all available inputs for that selected audio interface are shown. Selecting any available input from the audio interface re-maps that input to soundBlade's inputs used for recording external sources. It also relabels the output bus assigns on the Desk.

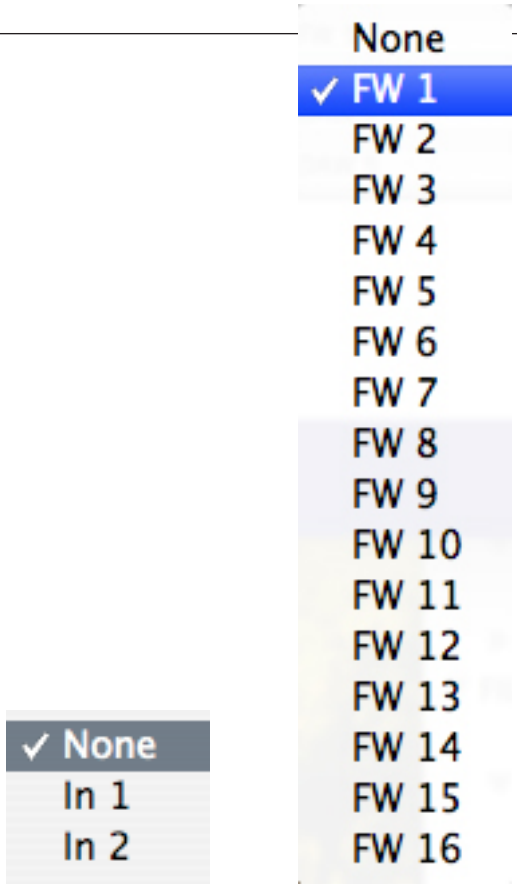
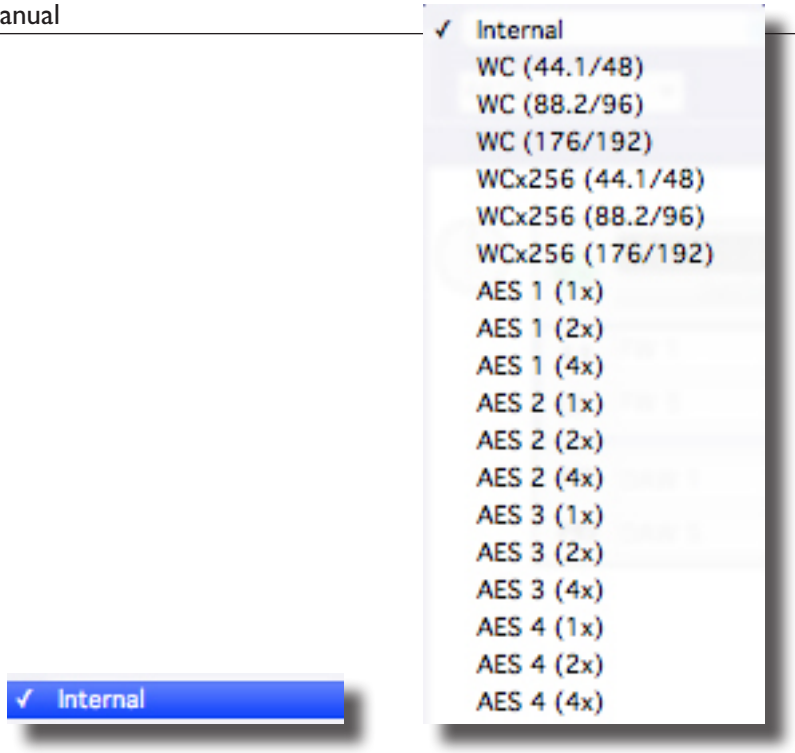


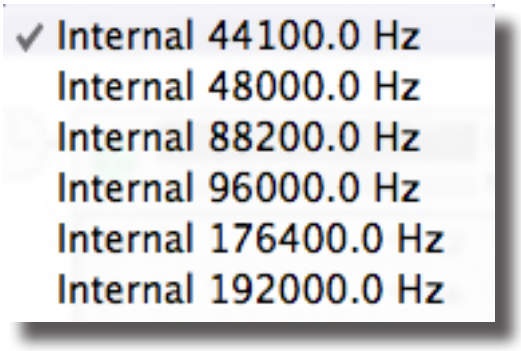
Figure 5.2: Input selectors

Amarra's clock source should be checked as well. To do so, select either "internal" or "external" from the Master Clock source selectors.



Clock source selection

In addition, due to Mac OS restrictions, the sample rate must be set to match the incoming clock source, even when an external clock source is selected.



The settings in the Audio I/O Preferences window reflect the settings in Audio MIDI Setup at the instant you open the Audio I/O Preferences window. However, the information in Audio I/O Preferences are not dynamical-lupdated if anything in Audio MIDI Setup are changed while the Audio I/O Preferences window is open.

To make sure that the Audio I/O Preferences window accurately reflects the current setting of Audio MIDI Setup, press the "Re-Scan I/O" button. This updates the Audio I/O Preferences and re-loads the current settings from Audio MIDI Setup.

7.0.0 Registering Your Amarra Software

In order to receive warranty service, you must register your product with Sonic Studio. This may be done at any time with proof-of-purchase. We strongly recommend that you register with Sonic Studio as soon as you purchase your unit.

Why?

1. Your product will be registered with us.
   Registration is used as proof of ownership if your product is ever lost or stolen.

2. Sonic Studio updates Amarra software on a regular basis.
   This allows us to keep you informed of updates as they become available.

We strongly encourage you to create a License Control Panel Account. Please read the Amarra Activation Guide for information on this important feature.

Please register your Amarra software using our automated registration Web page at:
http://www.sonicstudio.com and click on Support => Register

Alternatively, our mail address is:

Amarra Software Registration
Sonic Studio, LLC
330 Sir Frances Drake Blvd
Suite A
San Anselmo, CA USA
94960-2552
Fax 1-775-330-8923

If you encounter issues using Amarra please refer to the information below for assistance. If none of these steps address your problem please contact your dealer or Sonic Studio support for more help.

8. 0.0 Troubleshooting Guide

Basic Macintosh Setup Tips

iTunes:

- Disable the Crossfade Songs preference in iTunes
- Disable the Sound Enhancer preference in iTunes
- Disable the Sound Check preference in iTunes

Energy Preferences

- Disable Sleep and other Energy saving Preferences.

Bluetooth

- Disable Bluetooth

Spotlight

- Disable Spotlight

Security

- Disable Infrared

TimeMachine

- Disable TimeMachine on your media drives.

- We highly recommend a fresh install of the operating on a clean disc.
  This can prevent problems later on.

- We also recommend that your computer be used exclusively for music playback.
  Email, web browsers, screen sharing and other applications can effect performance.

Issue: Amarra Authorization Answers.

I have entered my code and password correctly with a new password to do a re-activation, why is the application not being re-activated?

Verify that you have an Internet Connection. Your new password must be a new and never-used password. Verify that you have not previously used this password with this activation code.

How often will my application connect to the activation server via the Internet?

Your application uses the Internet when it is first installed, when it is re-activated (such as after a disk reformat and reinstall, or if the software is moved to a new computer). The application may also do a quick check with the server when you run the application.

software_DNA includes an anti-fraud system that disables activation codes in cases of credit-card chargeback or refund. Unless you are using offline activation (see below), your application will need to connect to the Internet at least once a month to verify the license status. When an activation code is revoked, the software remains in trial mode until a new, valid activation code is provided.

Will my application work if I don't have an Internet connection?

Yes, there is an offline activation method available. If no Internet connection is found during activation, or the activation server is not reachable, the software will ask you to do offline activation. The software will provide step- by-step instructions, where a file is written to disk that you move

to a computer that does have Internet access (or email access). You can move this file via LAN, floppy disk, CD-R or USB key. You can use your Internet browser (on a machine that does have Internet access) to visit a special page to upload this file and receive another file in return. If you do not have any working browsers then the file can be emailed to our tech support (note there may be a delay in the return of the file depending on the time of day and week).

During activation what information is passed to the server?

No personal information or information about your computer configuration are transferred. There is a one-way hash* of some machine configuration data, your chosen password, and the optional email address sent to the server. Your application may have an optional registration page and if you choose to fill that out, that information is also transferred during the first activation. If you do not provide the optional information (email address and registration information) then no personal information will be transferred. We suggest you do not use one of your important personal passwords for the activation password, or a password that personally identifies you.

*One-way Hash: Codes that identify parts of the computer are put through a special function (called a 'one way hash') that turns the codes into one code number that is unique to your computer but cannot be deciphered (or reverse engineered) to determine what those components are. Only this hash value is sent to the activation server and not the details on the computer parts.

Can I move Amarra to another computer?

Yes, this can be done easily. It is simply a matter of deactivating the application on one computer, reinstalling the application on the new machine, and reactivating the software. If you have remembered your password this will be a fast and easy process.

What is the email address for and is it mandatory?

The email address on the activation and reactivation dialogs is mandatory. It can be used to retrieve a lost password. When you provide the email address it will not be used for marketing purposes or sold / provided to any third party. If you do provide an email address we recommend it be one that will be active for some time.

What if I have forgotten my password and did not provide an email address (or my email address is no longer valid)?

During a reactivation the previously provided password is required. If the password has been lost and cannot be recovered (because an email address was not provided, or the email address is no longer valid) you will need to contact our support via email or by phone. We will be happy to reset your password.

Will changes to my computer cause my application to stop working?

There are no changes that will cause a permanent disabling of the software. Major changes (disk reformat being one such major change) will mean that you need to reactivate the software. If you have your password this will be a fast and easy process.

What happens if Sonic Studio or softWORKZ suspends service or goes out of business?

Both companies have been in business for several years, and are healthy and stable and will be around for many years to come!

Regardless, your activated application will continue working without the Activation server, although new activations or re-activations will not be possible. Both companies are committed to ensure that a patch will be made available ASAP to resolve this. Either a version with a replaced activation system or a version with no activation will be provided.

I wish to do an online activation but my firewall is set up to block such requests. What are the firewall settings?

The following is the information that you need to setup your firewall:
Main server IP address: reg1.softworkz.com
Backup server IP: reg2.softworkz.com
Backup server IP: reg3.softworkz.com
Port: 80 (Standard HTTP)
Domain: softworkz.com

Why is an activation system required at this time?

Software companies around the world have come to realize that activation- type copy-protection systems provide a reasonable solution to the problem of piracy while at the same time respecting customers by not burdening them with a hard-to-use licensing system. Reducing piracy means that the software vendor can use steady revenues to further improve the product and guarantee business continuation. It is unfortunate that piracy exists because we know the majority of our customers follow the license terms but it is a fact of life in this digital age. We trust that this new system will be virtually transparent for the majority of customers.

Issue: How to set up a remote volume

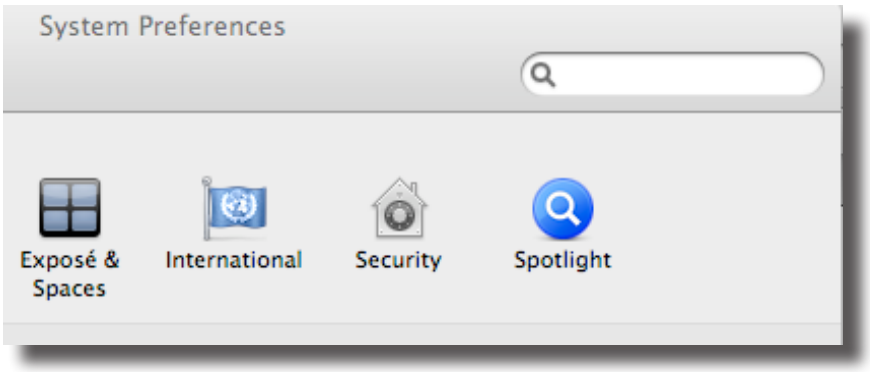
Amarra does not support streaming of remote songs.
Amarra requires that all volumes be mounted on the computer as a shared volume.

Solution:
• Mount the remote volume with Read/Write Access on your local Macintosh
    - Use the Network (Cmd-K) to locate and mount the remote volume
• In iTunes used the Add to Library command to add the songs from the Mounted Volume
• Mount the remote volume with Read/Write Access on your local Macintosh

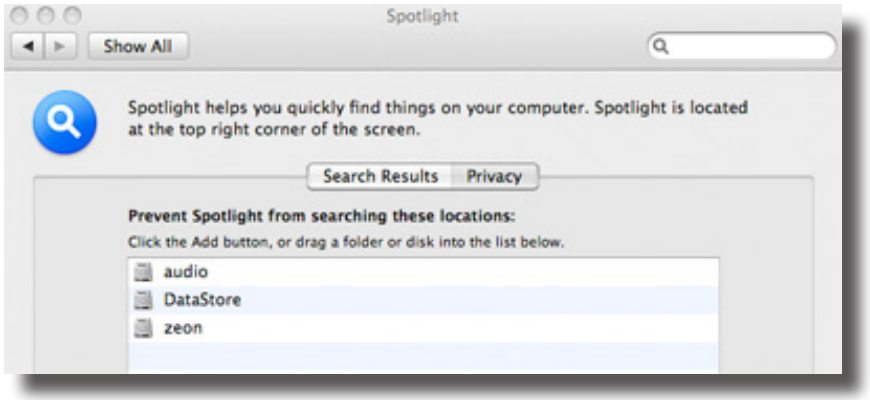
Issue: Audio Clicking or Ticking Sound.

Solution:
• Disable Spotlight (add volumes to the Spotlight Privacy Preference)

1) Open System Preferences and locate the Spotlight Preference



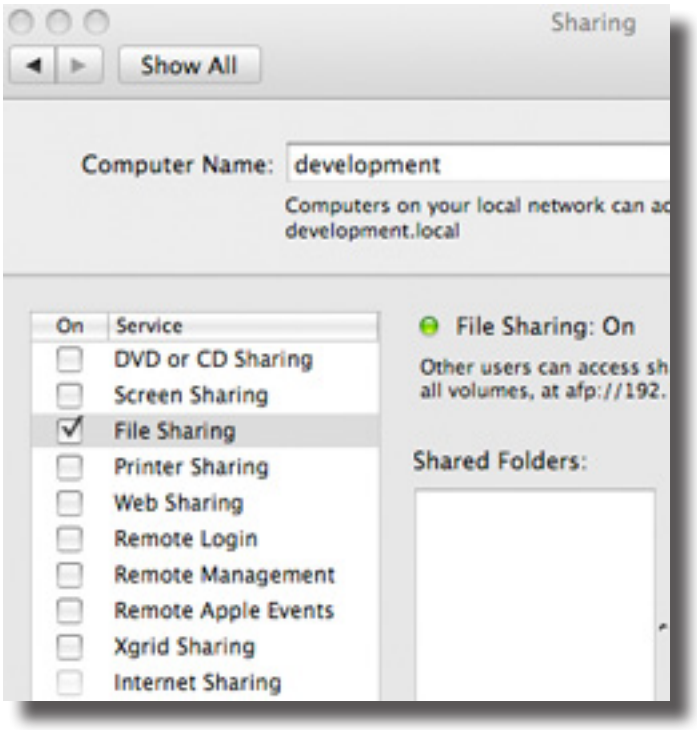
2) Select the Privacy Tab and add all your media drives


Spotlight
Show All
Spotlight helps you quickly find things on your computer. Spotlight is located at the top right corner of the screen.
Search Results
Privacy
Prevent Spotlight from searching these locations:
Click the Add button, or drag a folder or disk into the list below.
audio
DataStore
zeon

Solution:

• Disable Network Shared Access.

1) Open System Preferences and locate the Sharing Preference
2) Disable Web Sharing, Remote Login and Remote Management.
   Please note for support the Remote Management preference may be required.



Solution:

• Disconnect multiple FireWire devices and reduce daisy-chained connections.

Solution:

• Shut down other applications such as email and browsers.

Solution:

• Increase the amount of RAM in your computer.

Solution:

• Check that all drives are HFS formatted.
  Amarra does not support FAT32 drives.

Solution:

• Change the Sample Rate manually using Audio Midi Setup to a different value.
  Then switch the Sample Rate back.

Issue: Songs do not change or sound correctly.

Solution:
• Disable the Crossfade Songs preference in iTunes
• Disable the Sound Enhancer preference in iTunes
• Disable the Sound Check preference in iTunes
• Disable Sleep and other Energy Preferences.

Issue: Amarra does not play audio. Can not open File.

Solution:
• Check File Name and Permissions - Are they Read / Write
• You may also Quit Amarra and iTunes and restart Amarra.

NOTE: Sound files with names that contain ":" or other
Foreign characters may not play properly.
Changing the name of the soundfile can fix this.

Issue: Amarra does not play audio. Time does not change.

Amarra requires an input clock under Audio Midi Setup.
If your devices does not have an input when shown under AMS then please follow the instructions for creating an Aggregate Device.

Solution:
• Create an Aggregate Device under Audio Amarra Setup.
Please refer to the Aggregate Device Setup in the Documentation Folder.

Issue: Sample Rate Does Not Change With Soundfile.

Does your device support the sample rates for your music?
Amarra will only use the available rates on the device.
Otherwise, iTunes will be used (and sample rate conversion will occur).

9.0.0 Amarra Classic

This section presents some of the features found in (v2.3) Amarra Classic. Please contact Sonic Studio for information on how to purchase a Classic License Amarra Classic features are only available to Amarra v2.3 and earlier.

Meters Display

Amarra employs a high precision metering section to visibly display the audio signal. Select the "M" button to show the Meters.

TIP: Use the buttons in the lower left to show or hide the meters.

Amarra Track Area with Meters displayed

Preferences Window

Amarra Classic one additional preference for enabling the Full Sonic Masterinfg EQ window.

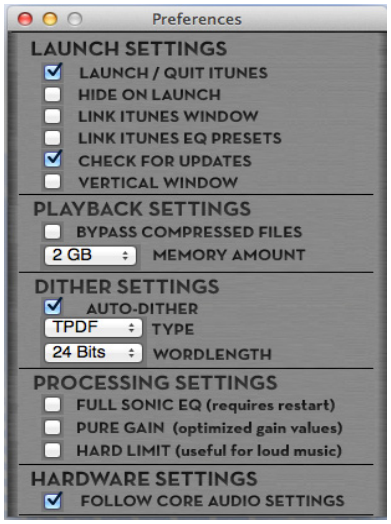


Figure 6.12: The Panner in Stereo mode

FULL SONIC-EQ :

Changes the Equalizer from iTunes-style generic EQ Window to full Sonic Mastering EQ. A restart is required for this option to engage.

Panner Window

Amarra Classic has a stereo panner that can be used to route the output with variable gain. To open the panner select File > Panner, which brings up the Panner window.

Figure 6.12: The Panner in Stereo mode

By default, the panner opens in off mode. In the upper left corner, the channel to which the panner currently applies is indicated. As this Track indicator is also a drop down menu, it operates as a Strip selector for the panner as well. In the upper right corner.

FULL Sonic Mastering EQ Window

Amarra Classic has Full 4-Band EQ. Types supported include : Notch, Low Pass, High Pass, and many more.

10.0.0 Support

We are committed to your successful use of Amarra and offer support for Amarra through your local dealer or via phone and email through Sonic Studio. Please also ask your local dealer for assistance. They have a great deal of knowledge about Amarra and are an excellent resource.

We are always interested in your experiences with Amarra .

For bug reports and support issues, visit:

www.sonicstudio.com

or email us:

support@sonicstudio.com

To suggest new features for our products, e–mail us at support@sonicstudio.com

For up to date information, please visit

www.sonicstudio.com

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